



Patent  
Docket No. 37213.01000  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/621,504  
Applicant : Martin Mallinson  
Filed : July 17, 2003  
TC/A.U. : ---  
Examiner : ---  
  
Docket No. : 37213-01000  
Customer No. : 27171  
Title : *Device and Method for Signal Processing*

**INFORMATION DISCLOSURE STATEMENT**

**COMMISSIONER FOR PATENTS**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R. §§1.56, 1.97 and 1.98. The items listed on Form PTO-1449, a copy of which is enclosed, may be deemed to be pertinent to the above-identified application and are made of record to assist the Patent and Trademark Office in its examination of this application. The Examiner is respectfully requested to fully consider the items and to independently ascertain their teaching.

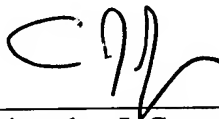
1. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, an English language translation of that item or a portion thereof or a concise explanation of the relevance of that item is enclosed:  

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2. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, a concise explanation of the relevance of that item is incorporated in the specification of the above-identified application.
3. ☐ Any copy of the items listed on the enclosed copy of Form PTO-1449 that is not enclosed with this Information Disclosure Statement was previously cited by or submitted to the Patent and Trademark Office in the prior [ ] Continuation, [ ] Divisional or [ ] Continuation-In-Part application under 37 C.F.R. §1.60, U.S. Serial No. \_\_\_\_\_, filed \_\_\_\_\_.
4. ☒ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with:

- ☒ 37 C.F.R. §1.97(b)(1), within three months of the filing date of the above-identified application.
- ☐ 37 C.F.R. §1.97(b)(2), within three months of the date of entry into the national stage as set forth in §1.491 in an international application.
- ☐ 37 C.F.R. §1.97(b)(3), before the mailing date of a first Office action on the merits.
5. ☐ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a Notice of Allowance (where there has been no prior final action), and is accompanied by one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below.
6. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a notice of allowance (where there has been no prior final action):
- ☐ A check in the amount of \$180.00 is enclosed in payment of the fee.
- ☐ Charge the fee to Deposit Account No. 13-3250. Order No. 36080-01400. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
7. ☐ A fee is due under 37 C.F.R. §1.17(i)(1) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(d), after the mailing date of a final action or a notice of allowance, whichever comes first, but before payment of the issue fee, and is accompanied by:
- a. one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below; and
- b. the attached petition requesting consideration of this Information Disclosure Statement; and
- c. the fee due under 37 C.F.R. §1.17(i)(1) which is paid as set forth in paragraph 10 below.
8. ☐ A fee is due under 37 C.F.R. §1.17(i)(1) for this Information Disclosure Statement since it is being filed in compliance with:
- a. ☐ 37 C.F.R. §1.313(b)(3), after the issue fee has been paid and information cited in this Information Disclosure Statement may render at least one claim unpatentable and is accompanied by the attached Petition To Withdraw Application From Issue;

- b. ☐ 37 C.F.R. §1.313(b)(5), after the issue fee has been paid and information cited in this Information Disclosure Statement is to be considered in a Continuation application upon abandonment of the instant application and is accompanied by the attached Petition To Withdraw Application From Issue.
- c. The fee due under 37 C.F.R. §1.17(i)(1) is paid as set forth in paragraph 10 below.
9. ☐ I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ I hereby certify that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
10. ☐ A check in the amount of \$180.00 is enclosed in payment of the fee due under 37 C.F.R. §1.17(p).
- ☐ Charge the fee due under 37 C.F.R. §1.17(i)(1) to Deposit Account No. 13-3250. Order No. 37213-01000. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- ☐ The Assistant Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-3250. Order No. 37213.01000. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,  
MILBANK, TWEED, HADLEY & McCLOY LLP



September 9, 2003

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FORM PTO-1449		DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 37213.01000	SERIAL NO. 10/621,504		
<b>INFORMATION DISCLOSURE CITATION</b>  (Use several sheets if necessary)				APPLICANT Martin Mallinson			
				FILING DATE July 17, 2003 <span style="float: right;">GROUP ART UNIT TBA</span>			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,777,512	7/7/98	Tripathi et al.			
		5,974,089	10/26/99	Tripathi et al.			
		6,414,560	7/2/2002	Delano			
		6,515,604	2/4/03	Delano			
<b>OTHER DOCUMENTS (including author, title, date, pertinent papers etc.)</b>							
		"Simple IIR Filters", Eric Hagemann, 2001					
		"A 13-Bit, 1.4-MS/s Sigma-Delta Modulator for RF Baseband Channel Applications", A. Feldman, et al., IEEE Journal of Solid State Circuits, Vol. 33, No. 10, October 1998					
		"A 113dB SNR Oversampling Sigma-Delta DAC for CD/DVD Application", K. Nguyen et al., Analog Devices					
		"A Wideband Low-Distortion Delta-Sigma ADC Technology", J. Silva et al.					
		"A 250 W Audio Amplifier with Straightforward Digital Input – PWM Output Conversion", A. Grosso et al.					
		Philips Semiconductors, Class D Amplifier Solutions, October 2001					
		"The Class-D Amplifier", W. Marshall Leach, Jr., Introduction to Electroacoustics and Audio Amplifier Design, Second Edition, 2001					
		"TMS320C67-Based Design of a Digital Audio Power Amplifier Introducing Novel Feedback Strategy", E. Bresch and W. Padgett, Rose-Hulman Institute of Technology, Electrical, and Computer Engineering Department					
		"Digital Control Circuit for Class-D Audio Power Amplifier", K. P. Sozanski, et al., Technical University of Zielona Gora, Institute of Electrical Engineering					
<b>EXAMINER</b>				<b>DATE CONSIDERED</b>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							